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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,284	08/16/2000	Yiming Ye	YOR9-2000-0149US1 (8728-3)	2916
46069	7590	09/25/2006	EXAMINER	
F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			AMINI, JAVID A	
			ART UNIT	PAPER NUMBER
			2628	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/640,284

Applicant(s)

YE, YIMING

Examiner

Javid A. Amini

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-5, 7, 8, 10-14 and 31 is/are allowed.
- 6) ☒ Claim(s) 15-17, 19-20, 22-26 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Allowable Subject Matter***

Claims 3-5, 7-8, 10-14, and 31 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 3, Adjusting a display unit of said signal transmitting device and a visual recording device of said signal receiving device and using an alternating display process to establish a visual connection between said display unit and said visual recording device; encoding a signal pattern as a visual image pattern using a generated signal template of said signal transmitting device; visually transmitting the visual image pattern through free space from the display unit of said signal transmitting device; receiving the visual image pattern using the visual recording device of said signal receiving device; and decoding the signal pattern from the visual image pattern using an image decoder of the signal receiving device, wherein adjusting the visual recording device includes the steps of: automatically adjusting pan and tilt of the visual recording device to have a view of the visual image pattern displayed by the display unit; and automatically adjusting an angle size of the visual recording device, and wherein automatically adjusting the pan and tilt for the visual recording device comprises: selecting a first tilt and a first pan position; panning for a position that does not overlap said first pan position; checking if panning positions have been exhausted; determining whether the first tilt is in a horizontal position if all panning positions have been exhausted; and determining a new tilt by moving the first tilt upwards for the value of  $h/2$  if the first tilt is in a horizontal position.

Regarding claim 31, Adjusting a display unit of said signal transmitting device and a visual recording device of said signal receiving device and using an alternating display process to establish a visual connection between said display unit and said visual recording device; encoding a signal pattern as a visual image pattern using a generated signal template of said signal transmitting device; visually transmitting the visual image pattern through free space from the display unit of said signal transmitting device; receiving the visual image pattern using the visual recording device of said signal receiving device; and decoding the signal pattern from the visual image pattern using an image decoder of the signal receiving device, wherein the decoding comprises: dividing the visual image pattern into a plurality of blocks; determining the centers of said blocks using a position and radius look-up table; creating a plurality of circles within said blocks having corresponding centers and radiuses determined by the position and radius look-up table; calculating average image intensities within said circles; using average image intensities within said circles as average image intensities of respective blocks of each of said circles; determining a plurality of black and white intensities from said average intensities of respective blocks of each of said circles using predetermined values; and decoding a pattern created by said black and white intensities, wherein the radiuses of said circles are 35% of the length of their respective blocks.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-17, 19-20, 22-26 and 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and the Examiner treated claims for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material.

The preambles of the claims disclosed "A program storage device readable by machine, tangibly embodying a program of instructions executable by machine to perform method steps for communication between processing devices comprising the steps of".

A handwritten mark, possibly a signature or initials, consisting of a large, stylized 'P' or similar character.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Javid A Amini  
Examiner  
Art Unit 2628

J.A.



KEE M. TUNG  
SUPERVISORY PATENT EXAMINER